

CLAIMS

We claim:

1 1. A method of providing interactive entertainment to a plurality of users, each
2 having a television receiver for receiving program information from a service through a first
3 communication path and a terminal connected to the service through a two-way communication
4 path, said method comprising the steps of:

5 transmitting television programs to the receivers through the first communication path;

6 logging a user into a network server associated with the service through the two-way
7 communication path;

8 said server being informed of user preferences;

9 controlling in said server, according to user preferences, transmission to a receiver of at
10 least one of program content and first supplemental information pertaining to a program; and

11 receiving information in the terminal over the two-way communication path from the
12 server descriptive of at least one of program delivery and second supplemental information
13 pertaining to a program.

1 2. The method of claim 1, wherein user preferences input through a terminal to the
2 server in conjunction with current program content partially alters current program content
3 provided to the user.

1 3. The method of claim 1, wherein said supplemental information is further
2 determined according to time of transmission of a television program.

1 4. The method of claim 2, wherein:

2 said supplemental information elicits a vote from a user;

3 said user preferences input through a terminal include a user's vote; and

4 said supplemental information subsequently includes information descriptive of users'
5 voting.

1 5. A method of providing interactive video and data displays to each of a plurality of
2 users, each having a television receiver and a data terminal, in accordance with information
3 provided by each user through a data terminal, comprising the steps of:

4 maintaining, in association with a network server, a first database of information for each
5 user including at least one of identification, address information, financial information, general
6 preference information, and demographic information;

7 receiving in the network server from user data terminals over the network and
8 maintaining in a second database, for each user, registration information indicating current
9 activity and current preference information;

10 and at least one of:

11 modifying content of television programming according to current content of said
12 first database and said second database; and

13 sending a message from the network server over the network for display on a
14 user's terminal.

1 6. The method of claim 5, wherein the step of modifying content of
2 television programming comprises:
3 determining according to current registrations in conjunction with said demographic
4 information a determined preponderant demographic group currently viewing a television
5 program; and
6 replacing advertisements in the television program with advertisements predetermined to
7 be targeted at said determined preponderant demographic group.

1 7. The method of claim 5, wherein the step of modifying content of television
2 programming comprises:
3 determining according to current registrations in conjunction with said demographic
4 information a determined plurality of demographic groups watching a particular program;
5 for each of said determined plurality of demographic groups exceeding in size a
6 predetermined threshold, replacing advertisements in the television program as transmitted via
7 cable or satellite transmission with advertisements predetermined to be targeted at each
8 demographic group and inserting control information in the television transmission for
9 instructing users' set-top boxes to extract and forward information targeted at the demographic
10 group.

1 8. The method of claim 5, wherein the information provided by a user includes a
2 request for additional information regarding television content the user is registered as viewing,
3 and wherein the network server arranges for additional information to be mailed to the user at an
4 address retrieved from the first database.

1 9. The method of claim 5, wherein the information provided by a user includes a
2 request for additional information regarding television content the user is registered as viewing,
3 and wherein the network server appends such additional information to cable or satellite
4 television transmission for viewing by the requesting user.

1 10. The method of claim 5, wherein the information provided by a user includes a
2 request to purchase an item currently featured in television content the user is registered as
3 viewing,
4 and wherein the network server arranges for the item to be shipped to the user and
5 arranges to debit the user for cost of the item from a financial account according to the first
6 database.

1 11. The method of claim 5, wherein the information provided by a user includes a
2 request to participate in a lottery, and wherein the network server:
3 prompts the user to select lottery numbers;
4 receives and validates user-selected lottery numbers;
5 debts the user for participating in the lottery from a financial account according to the
6 first database;
7 enters the user in the lottery; and
8 sends a message for display to the user confirming participation in the lottery.

1 12. The method of claim 5, wherein the information provided by a user includes a
2 request to learn the most commonly selected numbers in a lottery, and wherein the network
3 server:

4 obtains the most commonly selected lottery numbers; and
5 forwards a message to the requesting user terminal for displaying said most commonly
6 selected lottery numbers.

1 13. The method according to claim 12, wherein the message for displaying said most
2 commonly selected lottery numbers displays in the form of a histogram.

1 14. The method according to claim 12, wherein if the number of users requesting to
2 learn said most commonly selected lottery numbers exceeds a predetermined threshold, the
3 network server appends a display of said most commonly selected lottery numbers to television
4 programming.

1 15. The method according to claim 5, wherein the information provided by a user
2 includes commentary regarding television program the user is registered as viewing, and wherein
3 the network server forwards messages for displaying a user's commentary to other users
4 registered as viewing the same television program.

1 16. A system for providing interactive video and data displays to each of a plurality of
2 users, comprising:

3 a television receiver associated with each user;

4 a data terminal associated with each user;

5 a network server;

6 a network for connecting the data terminals to the network server;

7 a first database associated with the network server for storing persistent information
8 descriptive of each user; and

9 a second database associated with the network server for storing current preference
10 information submitted by users;

11 the network server operable to modify television programs being transmitted to users,

12 whereby the network server, responsive to said first and second databases and to current
13 requests from users, provides interactive displays on users' terminals and adapts television
14 programming interactively.